

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of the claims in the application:

**Listing of Claims:**

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1. (Currently amended) Apparatus for the treatment of hazardous material and decontamination of items contaminated with such material comprising  
an operator accessible treatment vessel having at least one decontamination tray adapted to hold said hazardous material or contaminated items,  
a holding tank capable of holding a carrier medium,  
a catalyst hopper capable of holding a catalyst,  
a mixing vessel connected to each of the holding tank, catalyst hopper and treatment vessel, facilitating mixing of the carrier medium and the catalyst,  
wherein the ~~treatment vessel~~ apparatus comprises one or more treatment chambers, the treatment chambers comprising
  - (i) a housing containing a plurality of treatment beds and a light source capable of irradiating contents within the treatment chambers with a predetermined wavelength of light, each treatment bed comprising means for inducing turbulent flow within the carrier medium, and
  - (ii) a distribution header connected to the mixing vessel for controlling the flow of carrier medium and catalyst into the treatment chambers.
- 2-10. (Cancelled)
11. (New) Apparatus according to claim 1 wherein the turbulent flow within the carrier medium is induced by one or more channels on the surface of the treatment bed, each channel having a textured surface.

12. (New) A method for the treatment of hazardous material and decontamination of items contaminated with such material, comprising the steps of providing the hazardous material and contaminated items in a treatment chamber of the apparatus according to claim 1; and irradiating said hazardous material and contaminated items in the presence of a catalyst with light having a wavelength in the range of from 310 to 400 nanometers.

13. (New) A method according to claim 12 comprising the step of treating at least one of equipment and instruments contaminated with hazardous material.

14. (New) A method according to claim 13 comprising maintaining the at least one of equipment and instruments contaminated with hazardous material stationary whilst irradiating it with a predetermined wavelength of light.